

Table A-33. Number of full-time equivalent (FTE) R&D scientists and engineers in companies that performed industrial R&D in the U.S., by industry and size of company, by source of R&D funds: January 2001

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Industry and size of company	NAICS codes	Total	Federal	Company	
		[In thousands]			
Distribution by industry:					
All industries.....	21–23, 31–33, 42, 44–81	1,041.3	(S)	77.8	963.5
Manufacturing.....	31–33	608.8	(S)	43.8	(S) 565.0
Food.....	311	7.2		(D)	(D)
Beverage and tobacco products.....	312	1.9		(D)	(D)
Textiles, apparel, and leather.....	313–16	2.1		(D)	(D)
Wood products.....	321	(S) 1.3		0.0	(S) 1.3
Paper, printing and support activities.....	322, 323	(S) 12.4		(D)	(D)
Petroleum and coal products.....	324	(S) 2.8		(D)	(D)
Chemicals.....	325	81.3	(S)	0.7	(S) 80.6
Basic chemicals.....	3251	12.4	(S)	0.2	12.2
Resin, synthetic rubber, fibers, and filament.....	3252	9.6	(S)	0.1	(S) 9.5
Pharmaceuticals and medicines.....	3254	42.5		(D)	(D)
Other chemicals.....	325 (minus 3251–52, 3254)	(S) 16.8		(D)	(D)
Plastics and rubber products.....	326	12.3		0.0	(S) 12.3
Nonmetallic mineral products.....	327	6.6		(D)	(D)
Primary metals.....	331	(S) 4.6	(S)	0.1	(S) 4.5
Fabricated metal products.....	332	9.8		(D)	(D)
Machinery.....	333	51.7		0.2	51.5
Computer and electronic products.....	334	(S) 246.1	(S)	23.9	(S) 222.2
Computers and peripheral equipment.....	3341	23.2		0.0	23.2
Communications equipment.....	3342	(S) 80.7		(D)	(D)
Semiconductor and other electronic components.....	3344	(S) 65.0		0.2	(S) 64.8
Navigational, measuring, electromedical, and control instruments.....	3345	75.1	(S)	22.5	52.6
Other computer and electronic products.....	334 (minus 3341–42, 3344–45)	2.2		(D)	(D)
Electrical equipment, appliances, and components.....	335	22.7		(D)	(D)
Transportation equipment.....	336	108.6	(S)	18.0	90.6
Motor vehicles, trailers, and parts.....	3361–63	75.2		(D)	(D)
Aerospace products and parts.....	3364	25.1		13.0	12.1
Other transportation equipment.....	336 (minus 3361–64)	(S) 8.3		(D)	(D)
Furniture and related products.....	337	(S) 2.4		0.0	(S) 2.4
Miscellaneous manufacturing.....	339	15.3		(D)	(D)
Medical equipment and supplies.....	3391	11.7		(D)	(D)
Other miscellaneous manufacturing.....	339 (minus 3391)	3.6		0.0	3.6
Other manufacturing	31–33 (minus 311–16, 321–27, 331–37, 339)	--		--	--
Small manufacturing companies ¹	Fewer than 50 employees	19.7		0.0	19.7

See explanatory information and SOURCE at end of table.

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Industry and size of company	NAICS codes	Total	Federal	Company
		[In thousands]		
Distribution by industry:				
Nonmanufacturing.....	21–23, 42, 44–81	432.5	(S) 34.0	398.5
Mining, extraction, and support activities.....	21	5.2	(D)	(D)
Utilities.....	22	0.6	(D)	(D)
Construction.....	23	0.5	(D)	(D)
Trade.....	42, 44, 45	99.1	(D)	(D)
Transportation and warehousing.....	48, 49	1.9	(D)	(D)
Information.....	51	117.2	(D)	(D)
Publishing.....	511	86.8	(D)	(D)
Newspaper, periodical, book, and database.....	5111	3.6	0.0	3.6
Software.....	5112	83.2	(D)	(D)
Broadcasting and telecommunications.....	513	12.0	(D)	(D)
Radio and television broadcasting.....	5131	(D)	(D)	(D)
Telecommunications.....	5133	(D)	(D)	(D)
Other broadcasting and telecommunications.....	513 (minus 5131, 5133)	0.2	0.0	0.2
Other information.....	51 (minus 511, 513)	18.4	(D)	(D)
Finance, insurance, and real estate.....	52, 53	20.5	0.0	(S) 20.5
Professional, scientific, and technical services.....	54	145.6	(S) 19.1	(S) 126.5
Architectural, engineering, and related services.....	5413	(S) 34.0	(D)	(D)
Computer systems design and related services.....	5415	46.4	0.7	(S) 45.7
Scientific R&D services.....	5417	56.8	(S) 12.4	44.4
Other professional, scientific, and technical services.....	54 (minus 5413, 5415, 5417)	8.4	(D)	(D)
Management of companies and enterprises.....	55	0.3	(D)	(D)
Health care services.....	621–23	2.9	0.0	2.9
Other nonmanufacturing	56, 61, 624, 71, 72, 81	5.8	(D)	(D)
Small nonmanufacturing companies ¹	Fewer than 15 employees	32.8	(D)	(D)

See explanatory information and SOURCE at end of table.

Table A-33. **Number of full-time equivalent (FTE) R&D scientists and engineers in companies that performed industrial R&D in the U.S., by industry and size of company, by source of R&D funds: January 2001**

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Industry and size of company	NAICS codes	Total	Federal	Company
		[In thousands]		
Distribution by size of company: [Number of employees]				
Total.....	(na)	1,041.3	(S) 77.8	963.5
5 to 24.....	(na)	53.6	(D)	(D)
25 to 49.....	(na)	32.3	(S) 0.2	(S) 32.1
50 to 99.....	(na)	35.8	0.8	35.0
100 to 249.....	(na)	55.6	2.0	53.6
250 to 499.....	(na)	45.7	(D)	(D)
500 to 999.....	(na)	66.7	2.9	(S) 63.8
1,000 to 4,999.....	(na)	154.3	(S) 2.7	151.6
5,000 to 9,999.....	(na)	(S) 107.3	(S) 13.9	93.4
10,000 to 24,999.....	(na)	151.6	(S) 5.4	146.2
25,000 or more.....	(na)	(S) 338.4	(S) 46.7	(S) 291.7

¹ The frame from which the statistical sample was selected was divided into two partitions based on total company employment. In the manufacturing sector, companies with employment of 50 or more were included in the large company partition. In the nonmanufacturing sector, companies with employment of 15 or more were included in the large company partition. Companies in the respective sectors with employment below these values, but with at least 5 employees, were included in the small company partition. The purpose of partitioning the sample this way was to reduce the variability in industry estimates largely attributed to the random year-to-year selection of small companies by industry and the high sampling weights that sometimes were assigned to them. Because of this, detailed industry statistics were possible only from the large company partition; detailed industry statistics from the small company partition were not possible. Statistics from the small company partition are shown separately and are included in manufacturing, nonmanufacturing, and all industries totals. For more information, see "frame creation" and "sample selection" in the technical notes in Section B.

KEY: (D) = Data have been withheld to avoid disclosing operations of individual companies.
(S) = Indicates imputation of more than 50 percent.
(--) = Indicates data not collected.
(na) = Not applicable.

NOTE: The company R&D in this table is the industrial R&D performed within company facilities funded from all sources except the Federal Government. The funds predominantly are the company's own, but also include funds from outside organizations such as other companies, research institutions, universities and colleges, nonprofit organizations, and State governments. Excluded from this table are company-funded R&D not performed within the company (e.g., R&D contracted out to other organizations) and company-funded R&D not performed in the U.S. (e.g., R&D not performed on U.S. soil by foreign subsidiaries or other foreign organizations).

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2000